

Energy Efficiency Cornerstone Act Side-by-Side Comparison

RESIDENTIAL AND COMMERCIAL BUILDINGS (also see tax incentives at end)

| Item | Energy Efficiency Cornerstone Act | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference Report (2003) | | |
|------------------|--|---|---|--|--|--|
| Appliance and | Appliance and Equipment Standards | | | | | |
| New standards | Sec. 101-102: In addition to the HR 6 Conference Report provisions, enacts standards, mostly based on new agreements, for commercial refrigerators and freezers, commercial packaged air conditioners, commercial coin-op clothes washers, commercial ice makers, dehumidifiers, pedestrian signals, mercury vapor light ballasts, and pre-rinse spray valves. | Sec. 133, 135: In addition to the HR 6 Conference Report provisions, sets a standard for ceiling fans that is weaker than a previous agreement, and preempts state standards for ceiling fans and ceiling fan light kits. | Sec. 135, 136: Cornerstone Act provision. | Sec. 133:Legislates standards for exit signs, torchiere lamps, certain transformers, traffic signal modules, unit heaters, and compact fluorescent lamps. Directs rulemakings for: battery chargers and external power supplies, ceiling fans, vending machines, and commercial refrigerators and freezers. Sets associated test procedures. | | |

| Item | Energy Efficiency | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference Report |
|-----------------|-----------------------------------|--------------------------------|--------------------------------|--------------------------------|
| | Cornerstone Act | | | (2003) |
| DOE | Sec. 101, 104: Clarifies DOE's | Same as the HR 6 Conference | Clarifies DOE's authority to | Clarifies DOE's authority to |
| rulemakings | authority to set two different | Report | set standards for both | regulate electricity use for |
| under existing | standards, based on climate | | functions of products with | residential furnace fans as |
| laws | regions, for heating and cooling | | two major functions, as well | well as gas use in the |
| | equipment, and to set standards | | as to regulate furnace fans. | furnaces. |
| | for both functions of products | | | |
| | with two major functions, as well | | Creates expedited rulemaking | |
| | as to regulate furnace fans. | | procedures for a direct final | |
| | Authorizes \$150 million over 5 | | rule in case of an agreement, | |
| | years (2006-2010) for the DOE | | and barring judicial review of | |
| | program and requires a report to | | procedural issues for such a | |
| | Congress on reasons for delays | | rule. | |
| | and timetables for uncompleted | | | |
| | rulemakings. | | | |
| Preemption of | HR 6 provision. Also, on some | Sec. 133, 135, 136: Also lifts | Cornerstone Act provision. | Preempts new state and local |
| state | new standards, federal | federal preemption of state | • | standards at date of enactment |
| standards | preemption of state standards | standards on a product if | | of new legislated standards |
| | would be suspended if DOE fails | DOE fails to establish a new | | and date of final rule for |
| | to issue a required standard | required standard (but not an | | rulemakings. |
| | update. | update) within three years of | | 8 |
| | | a legal deadline. | | |
| Energy Star and | l Product Labels | | | |
| Funding + | Sec. 121: Triples overall funding | Sec. 131: Same as the HR 6 | Sec. 131: Same as the HR 6 | Sec. 131: Authorizes |
| expansion | for the Energy Star program over | Conference Report | Conference Report | voluntary Energy Star |
| • | a five-year period so it can | • | • | Program at EPA and DOE. |
| | expand to cover more products | | | |
| | and services. | | | |
| Updates | Requires updates to Energy Star | No provision | Requires regular updates to | No provision |
| 4 | eligibility requirements so only | | Energy Star eligibility | |
| | the most efficient buildings and | | requirements | |
| | products are selected. | | • | |

| Item | Energy Efficiency Cornerstone Act | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference Report (2003) |
|------------------------------|---|---|---|---|
| Transparency | HR 6 provision | Same as the HR 6 Conference Report | Same as the HR 6 Conference Report | Directs EPA and DOE to get comments before establishing or revising product categories or specifications, and to provide appropriate lead time (generally 9 months) before implementing any changes. |
| Energy Guide labels | Sec. 103: HR 6 provision | Sec. 134: Same as the HR 6 Conference Report | Sec. 138: Same as the HR 6 Conference Report | Sec. 134: Directs the Federal Trade Commission to conduct a rulemaking to improve Energy Guide labels for consumer products. |
| Tax incentives or rebates | No provision—in House bill. | Sec. 124: Same as the HR 6 Conference Report | Sec. 123: Same as the HR 6 Conference Report | Sec. 124: Authorizes DOE to supplement eligible state programs to replace old appliances with Energy Star appliances. Authorizes appropriations of \$50 million per year from FY2004 through FY2008. See also appliance tax incentives below. |
| Building Codes | | | | |
| Compliance | Sec. 111: Creates a \$25 million/year federal fund to support states in achieving high rates of compliance with up-to-date building energy codes. | No provision | Sec. 127: Cornerstone Act provision | No provision |
| Manufactured housing | Sec. 112: Updates the HUD manufactured housing standards to current IECC model energy code (2004 supplement). | No provision | No provision | No provision |

| Item | Energy Efficiency Cornerstone Act | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference Report (2003) |
|--|---|--|---|---|
| Subsidized housing | Sec. 113: HR 6 conference report provision, with updated code reference. | Sec. 148: Modified to apply only to public housing funded by HOPE VI grants. | Sec. 163: House provision. | Sec. 148: Updates the standard for public housing and housing with federally insured mortgages to 2003 IECC model energy code. |
| Federal Energy | Management | | | |
| Energy Savings Performance Contracts (ESPCs) | Sec. 132: As in the HR 6 conference report, permanently reauthorizes Energy Savings Performance Contracts (ESPCs), which allow private financing of energy improvements to federal buildings. | Sec. 105: Extends authorization for ESPCs but restricts the number of additional contracts to 100 (after enactment), limits funding for those contracts to \$500 million, and allows only three agencies (DOE, DOD, VA) to enter into the contracts. Does not include a pilot program for mobile applications. | Sec. 105: Permanently reauthorizes ESPCs. Does not include pilot program for vehicles. | Sec. 105: Permanently and retroactively reauthorizes ESPCs. Includes efficient use of water sources as eligible "savings" for ESPC projects. Sec. 106: Authorizes pilot program of up to 10 non-building ESPCs, not to exceed \$200 million. |
| Energy targets | No provision—in House bill. | Sec. 102: Updates provision to reflect a 2003 baseline and target years from FY 2006 through FY 2015. | Sec. 102: Updates provision to reflect a 2004 baseline and target years from FY 2006 through FY 2015. | Sec. 102: Sets 2%/year annual reduction goals in FY 2004 through FY 2013. Also applies to water conservation. Allows agencies to keep energy expenditure funds retained due to energy savings. |

6/27/05

| Item | Energy Efficiency | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference Report |
|-------------|---------------------------------|------------------------------|--------------------------------|-------------------------------|
| | Cornerstone Act | | | (2003) |
| Building | Sec. 131: Updates minimum | Sec. 103, 109: Same as HR 6 | Sec. 103, 107: Updates | Sec. 109: Directs DOE to set |
| standards | standard in HR 6 conference | conference report provisions | minimum standard in HR 6 | standards for new federal |
| | report provision to 2004 IECC | | conference report provision to | buildings to at least 30% |
| | and 2004 ASHRAE. | | 2004 IECC and 2004 | below ASHRAE or IECC |
| | | | ASHRAE. | standards if cost-effective; |
| | Requires privatized military | | | updates minimum standard to |
| | housing to earn the Energy Star | | | 2003 IECC. |
| | designation and use Energy Star | | | |
| | products. | | | Sec. 103: Directs that all |
| | | | | federal buildings be metered |
| | | | | or submetered by 10/1/2010. |
| Procurement | No provision—in House bill. | Sec. 104: Same as the HR 6 | Sec. 104: Same as the HR 6 | Sec. 104: Requires |
| | | Conference Report | Conference Report | procurement of Energy Star |
| | | | | or FEMP designated products |
| | | | | unless they are determined |
| | | | | not to be cost-effective on a |
| | | | | life-cycle basis or not to be |
| | | | | reasonably available. |
| Consumer | No provision | Sec. 132: Same as the HR 6 | Sec. 132: Same as the HR 6 | Sec. 132: Directs DOE to |
| Education | | Conference Report | Conference Report | educate homeowners and |
| | | | | small businesses on the |
| | | | Sec. 133: Authorizes public | benefits of HVAC |
| | | | energy education program | maintenance, and directs the |
| | | | | SBA to assist small |
| | | | Sec. 134: Authorizes \$90 | businesses in becoming |
| | | | million per year (FY 2007 | energy efficient. |
| | | | through 2010) for education | |
| | | | focused on consumer actions | |
| | | | to reduce natural gas, oil and | |
| | | | electricity. | |

TRANSPORTATION (also see tax incentives at end)

| Item | Energy Efficiency Cornerstone Act | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference Report (2003) |
|-----------------------------------|--------------------------------------|--|---|---|
| Fuel Economy S | Standards | | | |
| Increase CAFE standards | No provision | No provision | No provision | No provision |
| Close/Extend CAFE loopholes | No provision | Sec. 773: Extends CAFE credit for dual-fuel vehicles to 2010, with possible further extension to 2014. Sec. 775: Requires EPA to update test adjustment factors, but would not affect CAFE standards. | No provision. Does not extend CAFE credit for dual-fuel vehicles. | Sec. 773: Extends CAFE credit for dual-fuel vehicles to 2008, with possible further extension to 2012. |
| Other CAFE reforms | No provision | Sec. 772,. 774: Same as the HR 6 conference report | No provision | Sec. 772: Sets new criteria for CAFE: maximum feasible average fuel economy must take into account technological feasibility, economic practicability, effect of other motor vehicle standards, the need to conserve energy, effects on automobiles and occupant safety, and effects on automobile industry employment levels. Sec. 774: Requires study by DOT on the feasibility and effects of reducing the use of fuel for automobiles. |

| Item | Energy Efficiency | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference |
|--|--|--|---|--|
| | Cornerstone Act | | | Report (2003) |
| Fleet | Sec. 201: Similar provision as | Sec. 701: Requires federal | Sec. 704: Directs DOE to | Sec. 705: Allows alternative |
| Requirements | Senate bill Secs. 701 and 704, but modified so federal fleets also can use hybrids to meet EPAct fleet requirements. | dual fuel vehicles to operate on the alternative fuel. (Omits fleet requirement flexibility provisions.) | allow alternative fuel provider and state fleets to use hybrid and other vehicles to comply with requirements, or to opt out if they can achieve comparable reductions in oil use by some other means. Sec. 702: Terminates program when DOE creates a substitute, or in 2015. Sec. 701: Same as the HR 6 conference report | fuel provider and state fleets to use hybrid electric vehicles to comply with EPAct AFV fleet requirements, or to opt out of the requirements if they can achieve comparable reductions in oil use by some other means. Sec. 701: Requires federal dual fuel vehicles to operate on the alternative fuel. |
| Federal Fuel Consumption | Sec. 202: Each agency ensure by 9/30/08 that average fleet fuel economy of vehicles after 2004 is at least 3 mpg higher than FY 2004 baseline. | No provision | No provision | No provision |
| Hybrid and Diesel Vehicle Grants | No provision. But see vehicle tax incentives below. | Sec. 713: Authorizes \$300 million/year for 10 years to EPA for grants to domestic manufacturers to encourage production of and provide consumer incentives for hybrid and advanced diesel vehicles. | No provision. | No provision. But see vehicle tax incentives below. |
| Oil Savings | No provision | No provision | Sec. 151: President to develop and implement measures to reduce U.S. oil demand by 1 million barrels per day by 2015. | No provision |

INDUSTRY (also see tax incentives at end)

| Item | Energy Efficiency | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference |
|------------|----------------------------------|---------------------------------|-----------------------------|---------------------------------|
| | Cornerstone Act | | | Report (2003) |
| Voluntary | Sec. 301: DOE and EPA to seek | Sec. 107: Same as the HR 6 | Sec. 106: Similar to HR 6 | Sec. 107: DOE authorized to |
| Agreements | agreements to reduce energy | conference report | Senate and House provisions | enter into voluntary |
| S | intensity 2.5% each year from | | from 2003, authorizes DOE | agreements with industrial |
| | 2007-2016. Require independent | | to enter into voluntary | companies for significant |
| | verification of all reductions | | agreements. | reductions in energy intensity, |
| | below business-as-usual, and a | | | and to publicize their |
| | report to Congress on assistance | | | achievements. |
| | needed to help achieve the | | | |
| | reductions. | | | |

ELECTRIC AND NATURAL GAS UTILITIES (also see tax incentives at end)

| Item | Energy Efficiency | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference |
|---|--|---|---|-----------------------------|
| | Cornerstone Act | | | Report (2003) |
| Energy Efficiency Performance Standard (EEPS) | Sec. 401: Authorizes a study by DOE and NARUC on state and regional policies to promote cost-effective programs to increase end-use energy efficiency (e.g., | No provision | Sec. 139, 140, 141: Cornerstone Act provisions. NASEO also participates in the study. | No provision |
| Public Benefits Fund (PBF) | performance standards, PBFs, infrastructure planning). Sec. 402: Authorizes 3-7 state pilot programs, with \$25 million in funding over 5 years, to develop plans and programs designed to reduce electricity and natural gas consumption or demand by at least 0.75% per year. | No provision | | No provision |
| | Sec. 403: Requires state regulators and non-regulated utilities to determine within three years whether or not it is appropriate to direct the implementation of such energy efficiency policies and programs. | | | |
| Efficient | No provision | Sec. 1237, 1234: Also | No provision | Sec. 1237: Requires DOE |
| Dispatch | - | requires FERC regional boards on economic dispatch. | - | study on economic dispatch. |

| Item | Energy Efficiency Cornerstone Act | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference Report (2003) |
|---|--------------------------------------|---|--|--|
| Net Metering, Smart Metering, and Interconnection Standards | No provision | Sec. 1251, 1252, 1254: In addition to the HR 6 conference report provision, requires states to consider adopting standards for interconnection of distributed generation to the grid. | Sec. 1251, 1252, 1254: HR 6 conference report provisions, and interconnection standard provision as in House bill. | Sec. 1251, 1252: Requires state commissions to consider mandating the provision of net metering service to consumers with on-site generation from renewable and high efficiency sources, and of smart metering services. |

CROSS-CUTTING MEASURES

| Item | Energy Efficiency | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference |
|---|-----------------------------|---|--|---|
| | Cornerstone Act | | | Report (2003) |
| Research, Development, and Deployment Funding | No provision—in House bill. | Sec. 930: Authorizes appropriations for energy efficiency research, development, demonstration and commercial application programs of: FY06: \$620 million; FY07: \$700 million; FY09: \$925 million; FY10: \$1 billion. Specifies authorizations for vehicles, buildings, and industries programs. Bill includes separate authorizations for distributed generation and for hydrogen and fuel cells. | Sec. 911: Similar to the HR 6 conference report, authorizes funding for FY06-FY08. | Sec. 904: Authorizes appropriations for energy efficiency research, development, demonstration and technology deployment programs of: FY04: \$616 million; FY05: \$695 million; FY06: \$772 million; FY07: \$865 million; & FY08: \$920 million. Bill ncludes separate authorizations for distributed generation and for hydrogen and fuel cells. |

TAX INCENTIVES

| Item | Energy Efficiency | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference Report |
|-------------------------|--|--|---|---|
| | Cornerstone Act | | | (2003) |
| Buildings Tax | Incentives | | | |
| New homes | Sec. 501: Credit for efficient new homes similar to HR 6, but based on the 2004 IECC and applying through 2007 (30%) and 2009 (50%). | No provision | Sec. 1522: Similar to the HR 6 conference report, but with updated code baseline and effective years. Applies through 2007 (30%) or 2009 (50%). | Sec. 1305: Credit for builders up to \$1,000 for a home that saves at least 30% compared to the 2000 IECC code, and \$2,000 for a home that saves 50% relative to the code. Certification determined by the Secretary. Applies 2004-2006. |
| Existing homes | Sec. 502: Credit for improvement to existing homes that is a hybrid of the S.1637 and S. 680 credits. Provides up to \$300 for 20% of the cost for installing building envelope components certified as consistent with the 2004 IECC code in 2006, or a credit up to \$2,000 based on verified percentage reduction of energy costs in 2006-2009. | Sec. 1317: Same as the HR 6 conference report. Applies through 2007. | Sec. 1524: Performance-based incentive, similar to that in S. 680 (Snowe), but modified to set a floor of a 20% reduction in energy costs. Applies 2006-2008. | Sec. 1304: Credit for homeowners up to \$2,000 for 20% of the cost for installing building envelope components consistent with 2000 IECC. Components must be certified if total cost is over \$1000. Applies 2004-2006. |
| Commercial buildings | Sec. 503: Deduction for efficient commercial buildings up to \$2.25/square foot, similar to S. 680. Applies through 2010. | No provision | Sec. 1521: Similar to the HR 6 conference report provision, but deduction up to \$2.25/square foot. Applies through 2009. | Sec. 1308: Deduction up to \$1.50/square foot for buildings designed to use 50% less energy than required by the 2001 ASHRAE 90.1 model commercial code. Certification determined by the Secretary, including inspection and testing. Applies through 2007. |

| Item Energy Efficiency Cornerstone Act | | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference Report (2003) | |
|---|---|---|---|--|--|
| Heating and cooling equipment | Sec. 504: Credits for highly efficient residential heating and cooling equipment, including air conditioners, similar to S. 1637 and S. 680, but with modified criteria and credit amounts. | No provision | Sec. 1524: From S. 680, credits of \$300 for efficient central air conditioners, water heaters, and heat pumps, \$150 for furnaces and boilers, and \$50 for fans in furnaces, and equivalent business deductions. Applies 2006-2008. | No provision | |
| Appliances | Sec. 505: Credit for refrigerators, clothes washers, and dishwashers as in S. 1022, with criteria and credit amounts modified from the HR 6 conference report. | No provision | Sec. 1526: \$50-\$200 Credits for increased production of efficient refrigerators, clothes washers, and dishwashers, similar to S. 1022 (Smith). | Sec. 1307: \$100 and \$150 credits to manufacturers for increased production of efficient refrigerators and clothes washers. Applies 2004-2007. | |
| Stationary fuel cells | Sec. 507-508: Business and individual fuel cell credits as in HR 1397. | Sec. 1312: 15% credit up to \$500 per 0.5 kW. Applies through 12/31/07. | Sec. 1527, 1528: 30% credit up to \$500 per 0.5 kW, similar to S. 671. Applies 2006-2009. | Sec. 1301: 20% credit up to \$500 per 0.5 kW. Applies 1/1/04-12/31/06. | |
| Transportation | Tax Incentives | | | | |
| Hybrid and diesel vehicles | Sec. 511: Provides a tax credit for highly efficient hybrid and diesel vehicles, as in S. 971 (Hatch). | Sec. 1316: Provides purchasers of lean burn diesel vehicles a credit of \$500-\$3500 based on fuel economy and gas savings. | Sec. 1531: Provides purchasers of hybrid vehicles a credit based on fuel economy and gas savings, and a larger credit for heavy-duty vehicles. Applies through 2009. | Sec. 1318: Provides purchasers of hybrid and lean burn diesel vehicles a credit of \$250-\$3400 based on fuel economy and gas savings, and a larger credit for heavy-duty vehicles (\$7,500 - \$30,000), capped for each manufacturer. | |
| Industrial Tax I | | | | | |
| Combined heat and power | Sec. 521: Credit for combined heat and power similar to the HR 6 conference report, modified to include recycled energy and with updated years. Applies 2006-2008. | No provision | Sec. 1525: Similar to the HR 6 conference report. Applies through 2007. | Sec. 1306: Provides a 10% investment tax credit for combined heat and power systems up to 15 MW. Applies 2004-2006. | |

| Item | Energy Efficiency Cornerstone Act | House Energy Bill (2005) | Senate Committee Mark | H.R. 6 Conference Report (2003) | | | | | | |
|--------------------------|--------------------------------------|--------------------------|-----------------------|---|--|--|--|--|--|--|
| Utilities Tax Incentives | | | | | | | | | | |
| Time-of-use meters | No provision | No provision | No provision | Sec. 1309: Provides accelerated 3-year depreciation for time-of-use meters. | | | | | | |

Estimated Energy Savings from the Policies

(Annual savings in 2020)

| | 2003 Conference | 2005 House Bill | 2005 Senate Committee | Energy Efficiency Cornerstone Act + House Bill | | |
|----------------------|--------------------|--------------------|--------------------------|---|-------|------|
| | | Energy Sa | Oil (mbd) | Electricity Demand (GW) | | |
| Appliance | | | | | | |
| standards | 0.55 | 0.51 | 0.78 | 0.78 | 0.00 | 21.6 |
| Energy labels | 0.26 | 0.26 | 0.26 | 0.32 | 0.00 | 6.1 |
| CAFE reforms | -0.06 | -0.06 | 0.00 | -0.06 | -0.03 | 0.0 |
| Oil savings | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 | 0.0 |
| Industrial voluntary | | | | | | |
| agreements | 0.14 | 0.14 | 0.19 | 0.19 | 0.03 | 0.0 |
| State and utility | | | | | | |
| programs | 0.00 | 0.00 | 0.23 | 0.23 | 0.00 | 3.5 |
| Interconnection | 0.11 | 0.11 | 0.11 | 0.11 | 0.00 | 0.3 |
| RD&D funding | 0.26 | 0.26 | 0.26 | 0.26 | 0.05 | 2.2 |
| Tax incentives | | | | | | |
| Buildings | 0.56 | 0.11 | 0.76 | 0.95 | 0.00 | 14.5 |
| Vehicles | 0.11 | 0.01 | 0.11 | 0.11 | 0.06 | 0.0 |
| Industry | 0.27 | 0.00 | 0.27 | 0.27 | 0.00 | 0.7 |
| Total | 2.25 | 1.51 | 3.16 | 3.39 | 0.12 | 52.0 |
| % Energy use | 1.8% | 1.2% | 2.5% | 2.7% | 0.4% | 4.8% |

Estimated savings from the Alliance to Save Energy or the American Council for an Energy Efficient Economy, compared to the Energy Information Administration 2005 Annual Energy Outlook baseline. Estimates assume partial funding of authorized programs and voluntary targets partially met.

Total includes other policies, and adjusted to remove redundant savings.